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**Tobacco
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Official Standard Grades for Pennsylvania Seedleaf Tobacco (U.S. Type 41)

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(U.S. Type 41)

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DEFINITIONS

Definitions. As used in these standards, the words and phrases hereinafter defined shall have the indicated meanings so assigned.

Air-cured. Tobacco cured under natural atmospheric conditions. Artificial heat is sometimes used to control excess humidity during the curing period to prevent pole-sweat, pole-burn, and shed-burn in damp weather. Air-cured tobacco should not carry the odor of smoke or fumes resulting from the application of artificial heat.

Body. The thickness and density of a leaf or the weight per unit of surface. (See element of quality chart.)

Burn. The duration of combustion or length of time that a tobacco leaf will hold fire after ignition. (See Rule 17.)

Case (order). The state of tobacco with respect to its moisture content.

Class. A major division of tobacco based on method of cure or principal usage.

Clean. Tobacco is described as clean when it contains only a normal amount of sand or soil particles. Leaves grown on the lower portion of the stalk normally contain more sand or dirt than those from higher stalk positions.

Condition. The state of tobacco which results from the method of preparation or from the degree of fermentation. Words used to describe the condition of tobacco are: Undried, air-dried, steam-dried, sweating, sweated, and aged.

Crude. A subdegree of maturity.

Cured. Tobacco dried of its sap by either natural or artificial processes.

Damage. The effect of mold, must, rot, black rot, or other fungus or bacterial diseases which attack tobacco in its cured state. Tobacco having the odor of mold, must, or rot is considered damaged. (See Rule 16.)

Dirty. The state of tobacco containing an abnormal amount of dirt or sand. (See Rule 16.)

Elements of quality. Physical characteristics used to determine the quality of tobacco. Words selected to describe degrees within each element are shown in the element of quality chart.

Foreign matter. Any extraneous substance or material such as stalks, suckers, straw, or strings. (See Rule 16.)

Form. The stage of preparation of tobacco such as stemmed or unstemmed.

General quality. The quality of tobacco considered in relation to the type as a whole. General quality is distinguished from the restricted use of the term "quality" within a group.

Grade. A subdivision of a type according to group and quality and to other characteristics when they are of sufficient importance to be treated separately.

Grademark. In this type a grademark normally consists of a letter to indicate group and a number to indicate quality. For example, C2 means Stripper, good quality.

Group. A division of a type consisting of one or more grades based on certain characteristics which are related to stalk position or the general quality of the tobacco. Groups in this type are Stripper (C), Straight Stripped (X), Farm Filler (Y), and Nondescript (N). Throwout leaves not meeting C-group grade specifications will be included in the X and Y groups.

Injury. Hurt or impairment from any cause except the fungus or bacterial diseases which attack tobacco in its cured state but which is not serious enough to be classified as waste. (See definition of Damage.) Injury to tobacco may be caused by field diseases, insects, or weather conditions; insecticides, fungicides, or cell growth inhibitors; nutritional deficiencies, or excesses; or improper fertilizing, harvesting, curing, or handling. Injured tobacco includes dead, burnt, hail-cut, torn, broken, frost-bitten, frozen, sunburned, sunscalded, bulk-burnt, pole-burnt, shed-burnt, pole-sweated, stem-rotted, bleached, bruised, discolored, or deformed leaves; or tobacco affected by wildfire, rust, frog-eye, mosaic, root rot, wilt, black shank, or other diseases. (See Rule 13.)

Leaf scrap. A byproduct of unstemmed tobacco. Leaf scrap results from handling unstemmed tobacco and consists of loose and tangled whole or broken leaves.

Leaf-structure. The cell development of a leaf as indicated by its porosity. (See element of quality chart.)

Length. The linear measurement of cured tobacco leaves from the butt of the midrib to the extreme tip.

Lot. A pile, basket, bulk, package, or other definite unit.

Maturity. The degree of ripeness. (See element of quality chart.)

Nested. Any tobacco which has been loaded, packed, or arranged to conceal foreign matter or tobacco of inferior grade, quality, or condition. Nested includes any lot of tobacco which contains foreign matter or damaged, injured, tangled, or other inferior tobacco, any of which cannot be readily detected upon inspection because of the way the lot is packed or arranged. (See Rule 16.)

Oil (life). A soft, semifluid constituent of tobacco (See element of quality chart.)

Offtype. Tobacco of distinctly different characteristics which cannot be classified as Type 41. (See Rule 16.)

Package. A hogshead, tierce, case, bale, or other securely enclosed parcel or bundle.

Packing. A lot of tobacco consisting of a number of packages submitted as one definite unit for sampling or inspecting. It is represented to contain the same kind of tobacco and has a common identification number or mark on each package.

Quality. A division of a group or the second factor of a grade based on the relative degree of one or more elements of quality.

Raw. Tobacco as it appears between the time of harvesting and the beginning of the curing process.

Semicured. Tobacco in the process of being cured or which is partially but not thoroughly cured. Semicured includes tobacco which contains fat stems, wet butts, swelled stems, and tobacco having frozen stems or stems that have not been thoroughly dried in the curing process (See Rule 16.)

Side. A certain phase of quality as contrasted with some other phase of quality, or any peculiar characteristic of tobacco.

Sound. Free of damage.

Stem. The midrib or large central vein of a tobacco leaf.

Stemmed. A form of tobacco, including strips and strip scrap, from which the stems or midribs have been removed.

Stem rot. The deterioration of an uncured or frozen stem resulting from bacterial action. Although stem rot results from bacterial action, it is inactive in cured tobacco and is treated as a kind of injury in this type. (See Rule 14.)

Strength (tensile). The stress a tobacco leaf can bear without tearing. (See element of quality chart.)

Strips. The sides of a tobacco leaf from which the stem has been removed or a lot of tobacco composed of strips.

Sweated. The condition of tobacco which has passed through one or more seasonal fermentations natural to tobacco packed with a normal percentage of moisture, or tobacco which has reached the same degree of fermentation under a ``forced-sweat" process.

Tobacco. Tobacco in its unmanufactured forms as it appears between the time it is cured and stripped from the stalk, or primed and cured, and the time it enters a manufacturing process. Conditioning, sweating, and stemming are not regarded as manufacturing processes.

Tobacco products. Manufactured tobacco, including cigarettes, cigars, smoking tobacco, chewing tobacco, and snuff, which is subject to Internal Revenue tax.

Type. A division of a class of tobacco having certain common characteristics and closely related grades. Tobacco which has the same characteristics and corresponding qualities, colors, and lengths is classified as one type, regardless of any factors of historical or geographical nature which cannot be determined by an examination of the tobacco.

Type 41. That type of cigar-leaf tobacco commonly known as Pennsylvania Seedleaf or Pennsylvania Broadleaf, produced principally in Lancaster County, Pennsylvania, and adjoining counties, and including other areas of Pennsylvania and Maryland in which the seedleaf variety is grown.

Undried. The condition of unfermented tobacco which has not been air-dried or steam-dried.

Uniformity. A grade requirement designating the percentage of a lot or packing which must meet the specified degree of each element of quality. (See Rule 12.)

Unstemmed. A form of tobacco, including whole leaf and leaf scrap, from which the stems or midribs have not been removed.

Unsweated. The condition of cured tobacco which has not been sweated.

Waste. The portion or portions of the web of tobacco leaves which, because of excessive injury, have been lost or rendered unserviceable for use in tobacco products. Waste includes: (a) Portions which have decomposed or largely decomposed by field diseases, field-firing, pole-burning, or bulk-burning; (b) Portions which have been sunburned; and © Portions which are dead, trashy, and do not have sufficient strength or stability to hold together in the normal manufacturing process due to excessive injury of any kind. (See Rule 13.)

Wet (high-case). Any sound tobacco containing excessive moisture to the extent that it is in unsafe or doubtful-keeping order.

Width. The relative breadth of a tobacco leaf expressed in relation to its length. (See element of quality chart.)

ELEMENTS OF QUALITY AND DEGREES OF EACH ELEMENT

Tobacco attributes or characteristics which constitute quality are designated as elements of quality. The range within each element is expressed by words or terms designated as degrees. These degrees are arranged to show their relative value and are used in determining the quality of tobacco.

ELEMENTS	DEGREES		
BODY	Thin	Medium	Heavy
MATURITY	Immature	Mature	Ripe
LEAF STRUCTURE	Close	Firm	Open
OIL (life)	Lean	Oily	Rich
STRENGTH (tensile)	Weak	Normal	Strong
WIDTH	Narrow		Normal
LENGTH		<u>1</u> /	

1\ Expressed in inches.

RULES

Rules. The application of these official standard grades shall be in accordance with the following rules.

Rule 1. Each grade shall be treated as a subdivision of a particular type. When the grade is stated in an inspection certificate, the type also shall be stated.

Rule 2. The determination of grade shall be based upon a representative sample or a thorough examination of a packing of tobacco.

Rule 3. The grade shall be based upon a representative sample of the lot or packing. A minimum of 10 percent of the bundles or bales shall be selected at random for sampling; a higher percentage may be sampled at the discretion of the inspector. To obtain the sample, a sufficient amount of tobacco shall be drawn to be representative of each selected bale. In determining the grade, the inspector shall consider the general quality of all samples. The grade assigned shall represent the quality of the lot or packing as a whole.

Rule 4. (Revoked)

Rule 5. Tobacco leaves shall be placed straight in bundles or bales of normal weight, size, and shape with the butts out and tips overlapping from 6 to 8 inches or sufficiently to make a level, solid, and uniform pack. The sides of the bundles shall be completely covered with paper and tightly bound with not less than three large twines spaced so that the tobacco will be held securely together. Baling paper shall not contain waterproofing materials, and both paper and twine shall be clean and free from any materials which could be injurious to the tobacco. Improperly packed tobacco shall be graded ``No - G."

Rule 6. The grade assigned to any lot or packing of tobacco shall be a true representation of the tobacco at the time of inspection and certification. If, at any time, it is found that a lot or packing of tobacco does not comply with the specifications of the grade previously assigned, it shall not thereafter be represented as such grade.

Rule 7. Any lot or packing of tobacco which meets the specifications of two grades shall be placed in the higher grade. Any lot or packing of tobacco on the marginal line between two grades shall be placed in the lower grade.

Rule 8. A lot or packing of tobacco meets the specifications of a grade when it is not lower in any element of quality than the degree stated in grade specifications and does not exceed the tolerance(s) of such grade.

Rule 9. Interpretations, the use of specifications, and the meaning of terms shall be in accordance with determinations or clarifications made by the Chief of the Standards and Testing Branch and approved by the Director of the Tobacco Division, Consumer and Marketing Service.

Rule 10. The use of any grade may be restricted by the Director during any marketing season when it is found that the grade is not needed or appears in insufficient volume to justify its use.

Rule 11. In determining the grade of a lot or packing of tobacco, the lot or packing as a whole shall be considered. Minor irregularities which do not affect over one percent of the tobacco shall be overlooked.

Rule 12. Uniformity shall be expressed in percentage. This percentage shall govern the portion of a lot or packing which must meet each Specification of the grade; the remaining portion must be closely related. The specified percentage of uniformity shall not affect limitations established by other rules.

Rule 13. Injury and waste tolerances shall be expressed in percentages. The appraisal of injury and waste shall be based upon the percentage of affected leaf surface or the degree of injury, and consideration shall be given to the kinds of injury normal to the group. Stem rot is treated separately and may be included in any grade only as stated in rule 14.

Rule 14. Stem rot shall not exceed 40 percent of the specified injury tolerance for any grade.

Rule 15. Frozen or frostbitten tobacco shall be included only in N1 or N2.

Rule 16. Tobacco shall be graded ``No - G" when it is damaged, dirty, nested, offtype, semicured, wet, improperly packed, contains foreign matter, has an odor foreign to the type, or does not meet the minimum specifications or exceeds either tolerance of the lowest grade of the C, X, and Y groups.

Rule 17. Burn shall be determined as the average burning time of leaves selected at random from the sample. A minimum of 10 leaves shall be selected as representative regardless of the number of bundles or bales in the lot. All burn tests shall be made on the same side of the leaf. The leaf shall be punctured to permit quick ignition when placed over a candle, alcohol lamp, or electrical-lighting device. Good burn shall average 5 seconds or longer; fair burn, 3 seconds; and poor burn, under 3 seconds. C1 shall require good burn and C2, fair burn.

GRADES

Stripper (C Group). This group consists of tobacco from which trash and Farm Fillers have been removed. Tobacco of this group is locally known as ``Wrappers."

U.S.

Grades Grade names, minimum specifications, and tolerances

C1 Fine Quality Stripper.

Medium body, ripe, open, rich in oil, strong, normal width, 22 inches or over in length. Uniformity, 80 percent. Tolerance: 10 percent injury.

C2 Good Quality Stripper.

Medium body, mature, firm, oily, normal strength and width, 18 inches or over in length. Uniformity, 80 percent. Tolerance: 20 percent injury of which 5 percent may be waste.

C3 Low Quality Stripper.

Thin, immature, close, lean in oil, weak, narrow. Uniformity, 80 percent. Tolerances: 10 percent crude and 30 percent injury of which 10 percent may be waste.

Straight Stripped (X Group). This group normally consists of tobacco from which trash and dirty fillers have been removed. Tobacco of this group is locally known as ``Pull-off."

U.S.

Grades Grade Names, Minimum Specifications, and Tolerances

X1 Fine Quality Straight Stripped.

Medium body, ripe, firm, oily, normal strength and width. Uniformity, 80 percent. Tolerance: 20 percent injury of which 5 percent may be waste.

X2 Good Quality Straight Stripped.

Medium body, mature, close, lean in oil, normal strength, narrow. Uniformity, 80 percent. Tolerance: 30 percent injury of which not over 10 percent may be waste.

X3 Low Quality Straight Stripped.

Thin, immature, close, lean in oil, weak, narrow. Tolerances: less than 20 percent crude and 30 percent waste.

Farm Filler (Y Group). This group consists of tied tobacco and normally is tobacco from the lower portion of the stalk.

U.S.

Grades Grade Names, Minimum Specifications, and Tolerances

Y1 Fine Quality Farm Filler.

Thin, ripe, firm, lean in oil, normal strength. Uniformity, 80 percent
Tolerance: 20 percent waste.

Y2 Good Quality Farm Filler.

Thin, immature, close, lean in oil, weak. Tolerances: 10 percent crude and 40 percent waste.

Nondescript (N Group). Frozen or frostbitten tobacco or tobacco which does not meet the minimum specifications or exceeds either tolerance of the lowest grade of any other group.

U.S.

Grades Grade Names and Specifications

N1 Field frozen or frostbitten tobacco in safe-keeping order or case.

N2 Frozen or frostbitten tobacco which is wet or in doubtful-keeping order or case.

No-G Tobacco which contains chicken dust, stone dust, or other foreign matter; is hail-cut or wasted in excess of the tolerances for X3 or Y2; is damaged, dirty, nested, offtype, semicured, wet, shingled or otherwise improperly packed; has an odor foreign to the type; contains 20 percent or more crude; or does not meet the minimum specifications of the lowest grade of the C, X, or Y groups.

SUMMARY OF STANDARD GRADES

<u>3 Grades of Stripper</u>	<u>3 Grades of Straight Stripped</u>	<u>2 Grades of Farm Filler</u>	<u>3 Grades of Nondescript</u>
C1	X1	Y1	N1
C2	X2	Y2	N2
C3	X3		No-G

KEY TO STANDARD GRADEMARKS

Groups	Qualities
C - Stripper	1 - Fine
X - Straight Stripped	2 - Good
Y - Farm Filler	3 - Low
N - Nondescript	